



California Water Plan 2013 Plenary

Breakout Session: Groundwater

September 12, 2012

1:45 pm – 4:00 pm

Meeting Summary

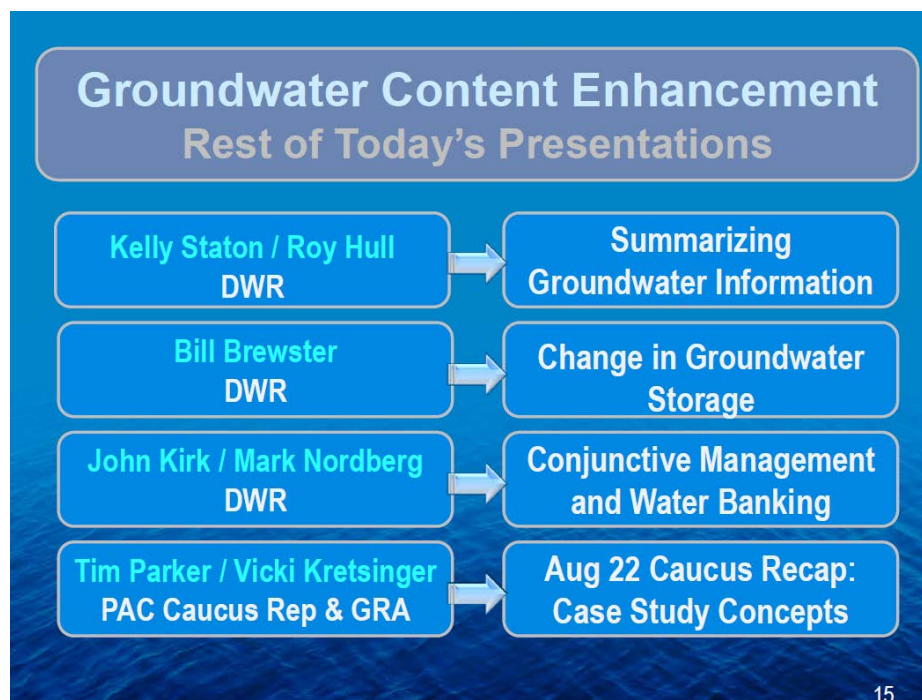
Welcome and Greetings

Charlotte Chorneau, Session Facilitator from the Center for Collaborative Policy, opened the Breakout Session on Groundwater, and reviewed the agenda. Ms. Chorneau said speakers at today's session would present summary results on each of the groundwater deliverables for the Water Plan Update 2013, identify next steps, and explain how to stay involved in the process.

Water Plan Groundwater Content Enhancement

Abdul Khan, Department of Water Resources (DWR) and Lead for the groundwater enhancement in Water Plan Update 2013, said that the Groundwater Workteam had exciting results to present and was excited to have so many people at the session. Over 70 individuals attended the 2-hour breakout session on groundwater. Mr. Khan made the first presentation and explained the objective of the groundwater enhancement initiative and also the status of the eight planned deliverables. The entire presentation is available online at

http://www.waterplan.water.ca.gov/docs/meeting_materials/plenary/2012-09-12.13/15-Item2_09122012CWPPlenary-GWStatus-Final.pdf



Dan McManus, DWR and Co-lead for the groundwater enhancement in the Water Plan Update 2013, continued the first presentation and discussed where groundwater content would appear in Update 2013. He noted that there would be a detailed standalone report, and much of the groundwater content would also feed into parts of the Update 2013 Regional Reports.

He then introduced the remaining presentations, and explained how the contents were related to each other. He stated that Kelly Staton and Roy Hull would summarize compiled groundwater information related to wells and groundwater management plans, Bill Brewster would discuss Change in Groundwater Storage, John Kirk and Mark Nordberg would present findings on conjunctive management and groundwater banking in California, and Tim Parker and Vicki Kretsinger would provide some preliminary ideas on groundwater case study concepts being contemplated at this time.

Mr. McManus explained that DWR was not intending to take any punitive action based on groundwater plan assessment results, and that the goal was to evaluate opportunities, identify challenges, and provide assistance to overcome those challenges. Mr. McManus also stated that DWR was reaching out to other state agencies, through the State Agency Steering Committee of the Water Plan, for greater coordination and alignment in groundwater related activities conducted by various state agencies.

Question:

What is the difference between the standalone Groundwater Report and Bulletin 118?

Response:

Mr. McManus: We have not updated Bulletin 118 for some time, and we do not have funding to update it. The current work will not replace Bulletin 118. Groundwater information is being generated and included in the Water Plan because of its nexus with resource management and overall water planning.

Mr. Khan: We hope that Bulletin 118 will support groundwater content for the Water Plan work if there is funding for Bulletin 118. If there is no funding, then the current work may subsume Bulletin 118 effort.

Mr. McManus: The question of continuing Bulletin 118 is one of resources.

Deliverables 1 and 2: Compiling and Summarizing Groundwater Information

Kelly Staton and Roy Hull, both from DWR, presented on “Deliverables 1 and 2: Compiling and Summarizing Groundwater Information.” The entire presentation is available online at http://www.waterplan.water.ca.gov/docs/meeting_materials/plenary/2012-09-12.13/15-Item3_CWP_Del-1_2-Plenary_9-12-2012V5-Final.pdf

Question:

Subsidence, is that one of the concerns?

Answer:

Mr. Hull: Inelastic subsidence is a required component in all groundwater management plans, and subsidence is indeed a concern.

Question:

You showed the statistics for the number of wells? Domestic wells produce a lot less water than municipal wells. Do you have information about the relative production capacity of the wells?

Answer:

Ms. Staton: The data set presented does not differentiate between domestic and municipal wells.

Question:

What are you looking for with regard to monitoring and managing surface water and groundwater interaction?

Answer:

Mr. Hull: The team looks for a complete response; specifically, the team looks for evidence that the local agencies who developed the groundwater management plans considered surface water and groundwater interaction, and it was not just an afterthought.

Question:

These are interesting statistics, but what is the significance of this information?

Answer:

Ms. Staton: Because of this analysis, we now know what groundwater well infrastructure is in place in terms of density. Knowledge about this is important for managing groundwater resources.

Mr. Khan: The goals are to identify gaps in groundwater management practices, and also develop recommendations for how to improve groundwater management.

Question:

How will the survey results related to sustainability be assessed if people were not provided a consistent definition of sustainability? Definitions of sustainability vary across individuals and different definitions may invalidate or skew results.

Answer:

Ms. Staton: This is a valid concern. The workteam would like to conduct a more scientific analysis on this in the future.

Mr. Khan: Those who are interested in this topic, may consider attending the Breakout Session on Sustainability Indicators at 10:00am on September 13, 2012.

Question:

How do we address the issues between water conservation practices (such as the use of drip irrigation) and groundwater recharge; for example in nitrogen management there is less nitrogen leaching if drip irrigation is used, but changing irrigation methods changes the amount of groundwater recharge that is occurring? Also, I would like to add that the Department of Food and Agriculture should be involved in this conversation.

Answer:

Mr. McManus: We acknowledge that concern. Groundwater Caucus is still working on that challenge.

Ms. Chorneau: Groundwater Caucus is going to be informed by a subcommittee of the State Agency Steering Committee. The Department of Food and Agriculture is a member of this Committee. Processes are being linked to make sure Agriculture has a voice when it comes to groundwater and recharge.

Mr. Khan: We anticipate that additional work is needed in this area, and we appreciate for pointing out the relationship between irrigation practices and groundwater recharge.

Deliverable 4: Estimating Annual Change in Groundwater Storage

Bill Brewster, DWR, presented on “Deliverable 4: Estimating Annual Change in Groundwater Storage.”

He noted that a more accurate caption for the effort would add the words at the end, “using Groundwater Level Data.” The entire presentation is available online at

http://www.waterplan.water.ca.gov/docs/meeting_materials/plenary/2012-09-12.13/15-Item4_Del4-GWchangeInStorage-Final20120910.pdf

Question:

With the bar chart, the bars represent the change from spring to spring and the lines represent the cumulative change, is that right?

Answer:

Mr. Brewster: That is correct.

Mr. McManus: The best way to capture this information is to merge the long-term hydrographs to provide context for the short term hydrographs and contour maps. Doing so will tell a comprehensive story than what appears on the Tulare Lake Hydrologic Region slide.

Comment:

I have a problem with the storage coefficient you are using; you need some way to calibrate those on a local basis. It is too general to assume that it is between .07 and .17. It is okay if it is all unconfined, but if there are confining conditions then it is of concern.

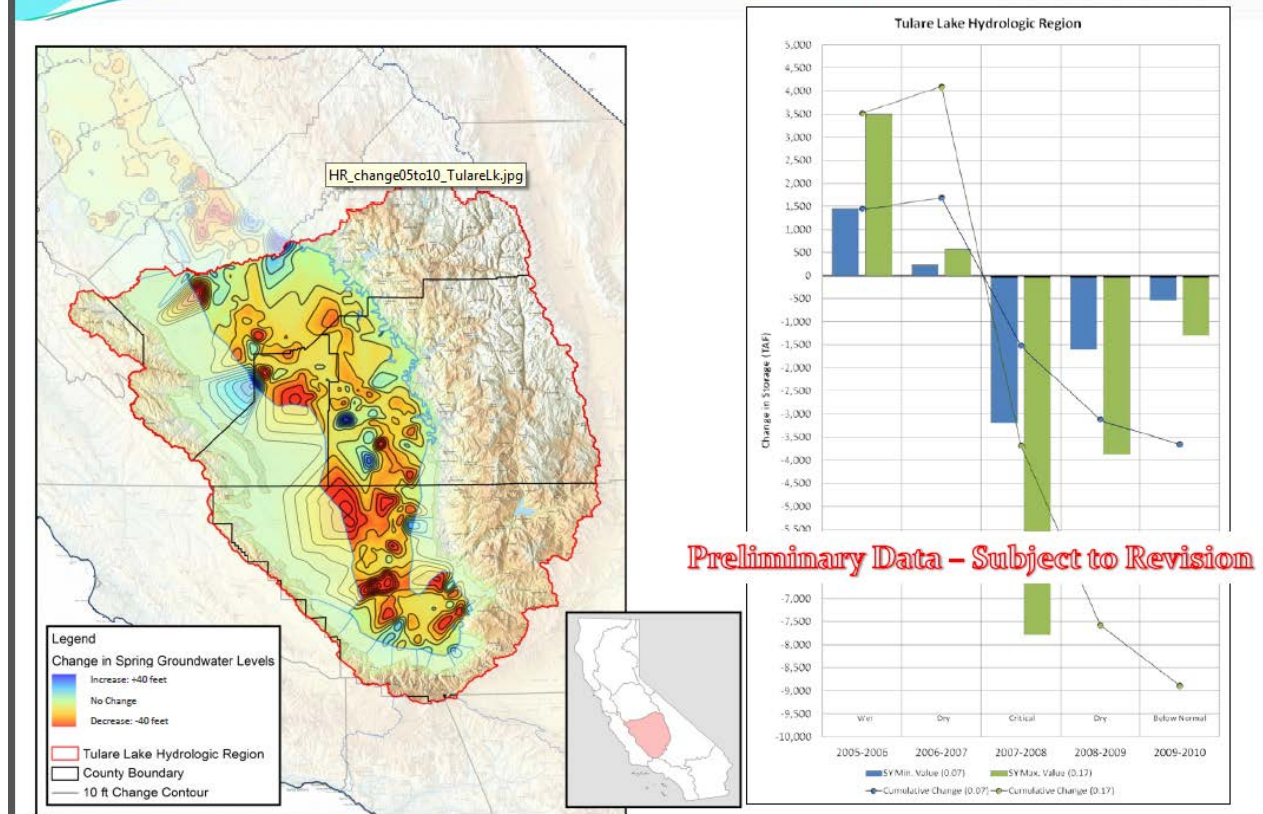
Response:

Mr. Brewster: The beauty of this GIS model is that it is simple enough that other storage coefficients can be used by local users who may know more about their own storage coefficients. We are trying to start simply and identify trends, keep it simple and explainable. Thus we can share the assumptions and others can adjust as needed to suit their assumptions.

Mr. Khan: The model does allow for some more sophisticated refinements.

Mr. Brewster: Because GIS is used, another layer of information can be applied, if it is available, but it has not been fully completed yet. We can also re-run and refine these numbers pretty rapidly using different assumptions if people want to use other numbers.

Tulare Lake Hydrologic Region



Question:

Can this be used as a tool and does it attribute whether we are looking at accretion and depletion of tributaries?

Answer:

Not at this time.

Comment:

You cannot ignore seasonal changes and different effects throughout the state.

Response:

Correct, we start by looking at spring because we think that is when the basin will be at its fullest, or most rebounded condition, but we may expand into other seasons to more fully understand the system. A discrepancy is not always a bad thing because it may provide more explanation of the system we are trying to understand.

Deliverables 6 and 7: Conjunctive Management and Groundwater Banking

John Kirk and Mark Nordberg, DWR, presented on “Deliverables 6 and 7: Conjunctive Management and Groundwater Banking.” The entire presentation is available online at

http://www.waterplan.water.ca.gov/docs/meeting_materials/plenary/2012-09-12.13/15-Item5_ConjunctiveMgmt_SeptPlenary_MSN_091012-Final.pdf

Question:

When you were going out to get information from different water agencies, was there a different response rate based on the size of the agency? Sometimes smaller agencies have more challenges responding because they don't have capacity.

Answer:

There was no apparent difference in the response rate based on the size of the organization.

Groundwater Caucus: Recap of August 22, 2012 Caucus

Tim Parker and Vicki Kretsinger, co-chairs of the Groundwater Caucus, Groundwater Resources Association of California, presented a summary on “Groundwater Caucus: Recap of August 22, 2012 Caucus.” The entire presentation is available online at

http://www.waterplan.water.ca.gov/docs/meeting_materials/plenary/2012-09-12.13/15-Item6_TParkerCWP_GWMtg-09122012final.pdf

Mr. Parker explained that many presenters had discussed plans, but that what we really needed to talk about was program implementation. Mr. Parker reminded attendees to visit www.grac.org for information on the upcoming GRA Annual Meeting, to be held on October 4-5, 2012.

Next Steps, Announcements and Adjourn

Ms. Chorneau thanked everyone for attending, thanked the presenters, and adjourned the meeting.